

WHAT IS CLAIMED IS:

1. A construction for arranging and supporting a cable (29) of a slide door (21), comprising:

a slider (25) to be mounted on a rail (23) laid on the slide door (21) for sliding along the rail (23) and adapted to support a door-side end of a stretching part (31) of the cable (29) transferred from a vehicle body (28) toward the slide door (21); and

a cable guide (27) formed to undergo a bending deformation only substantially in a specified plane, the cable guide (27) having a first end coupled to the slider (25) and a second end coupled to a fixing portion (35) for fixed coupling to the slide door (21), and adapted to guide the cable (29) introduced therein in a section between the slider (25) and the fixing portion (35).

2. The construction of claim 1, wherein the cable guide (27) comprises a plurality of substantially tubular links (39) coupled to undergo a bending deformation substantially in the specified plane.

3. The construction of claim 1, wherein the cable guide (27) comprises a corrugate tube (84) configured such that a bending direction is restricted to a specified direction to undergo a bending deformation substantially in the specified plane.

4. The construction of claim 3, wherein the corrugate tube (84) has a plurality of annular small-diameter portions (80) and a plurality of annular large-diameter portions (82) alternately and substantially continuously provided, and substantially flat couplings (86) for coupling adjacent annular large-diameter portions (82) substantially flush with each other.

5. The construction of claim 1, wherein a rail-side engaging portion (51) is provided on a surface of the rail (23) facing the vehicle body (28), the rail-side engaging portion (51) being slidably engageable with a slider-side engaging portion (53) of the slider (25).

6. The construction of claim 1, wherein the slider (25) is mounted on the rail (23) to bulge toward the vehicle body (28), the cable guide (27) is coupled to the slider (25) such that a slider-side opening thereof faces transversely; and the door-side end of the stretching part (31) is supported by the slider (25) near the slider-side opening of the cable guide (27).

7. The construction of claim 1, wherein the rail (23) is substantially linear.

8. The construction of claim 1, wherein the rail (23) has a section curved with respect to a longitudinal direction of the rail (23).

9. The construction of claim 1, wherein the rail (23) is twisted about a longitudinal axis at least in one section thereof with respect to a longitudinal direction of the rail (23).

10. The construction of claim 1, wherein: the rail (23) and the slider (25) are provided respectively with a rail-side engaging portion (51) and a slider-side engaging portion (53) engageable with each other to slidably hold the slider (25).

11. The construction of claim 10, wherein the slider-side engaging portion (53) has engaging grooves (55) in upper and lower surfaces thereof, and the rail-side engaging portion (51) has engaging projections (57) fit in the engaging grooves (55) of the slider-side engaging portion (53) from above and from below and extending along a longitudinal direction of the rail (23).

12. The construction of claim 10, wherein the rail-side engaging portion (51) has engaging grooves (59) in the upper and lower surfaces thereof along a longitudinal direction of the rail (23), and the slider-side engaging portion (53) has engaging projections (61) fit in the respective engaging grooves (59) of the rail-side engaging portion (51) from above and from below.

13. The construction of claim 10, wherein the rail-side engaging portion (51) has a fit-in portion (69) extending substantially along the longitudinal direction of the rail (23), and the slider-side engaging portion (53) has a holding groove (71) into which the fit-in portion (69) is fit and held so as not to come off.

14. The construction of claim 10, wherein the slider-side engaging portion (53) has a fit-in portion (73), and the rail-side engaging portion (51) has a holding groove (75) into which the fit-in portion (73) is fit and held so as not to come off and which extends substantially along a longitudinal direction of the rail (23).

15. The construction of claim 14, wherein at least one roller (63) is provided at a portion of the slider-side engaging portion (53) held substantially in sliding contact with the rail-side engaging portion (51).

16. A construction for arranging and supporting a cable (29) of a slide door (21), comprising:

a slider (25) to be mounted on a rail (23) laid on the slide door (21) for sliding along the rail (23) and adapted to support a door-side end of a stretching part (31) of the cable (29) transferred from a vehicle body (28) toward the slide door (21); and

a corrugate tube (84) having a first end coupled to the slider (25) and a second end coupled to a fixing portion (35) for fixed coupling to the slide door (21), and adapted to guide the cable (29) introduced therein in a section between the slider (25) and the fixing portion (35), the corrugate tube (84) having a plurality of longitudinally spaced rings (82), each said ring (82) defining a selected large diameter, a diametrically opposed pair of arc sections (80) extending between longitudinally adjacent rings (82) and defining a selected small diameter less than the large diameter, and diametrically opposed pairs couplings (86) defining the large diameter, each said diametrically opposed pair of couplings (86) coupling longitudinally adjacent rings (82) and coupling the diametrically opposed arc sections (80) in each said pair, such that the corrugate tube (84) can undergo a bending deformation only in a plane substantially centrally between the couplings (86).

17. The construction of claim 16, wherein the corrugate tube (84) is formed unitarily from resin.

18. The construction of claim 17, wherein the couplings (86) in each said pair are aligned longitudinally with the couplings (86) in the other pairs.